## ABSTRACT

The invention comprises an electro-mechanical

continuously variable transmission (EMCVT) that uses a

5 planetary gear system to provide a combination of electric
and mechanical power for a vehicle or for stationary
equipment. The EMCVT includes a clutch and brake system
that allows power from a energy storage unit to be combined
with the main power input (typically an engine) to provide

10 a torque output greater than that available from the main
power input alone.